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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,532	10/12/2006	Marie-Claire Grosjean-Cournoyer	P/4976-38	9561

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EXAMINER	
PIHONAK, SARAH	
ART UNIT	PAPER NUMBER
1627	
MAIL DATE	DELIVERY MODE
11/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/588,532	GROSJEAN-COURNOYER ET AL.	
	Examiner	Art Unit	
	SARAH PIHONAK	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-17 and 19* is/are pending in the application.

4a) Of the above claim(s) *18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-17 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This application is a national stage entry of PCT/EP05/02566, filed on 2/10/2005.

Priority

This application claims priority from Provisional Application No. 60/636898, filed on 12/17/2004, and claims foreign priority from Application No. 04356017.6, filed on 2/12/2004.

Withdrawal of Finality of Office Action

1. The indicated allowability of claims 9-17 and 19 is withdrawn in further consideration of the claims and the prior art. A new rejection of claims 9-17 and 19 under 35 USC § 103(a) is made, which will be discussed in depth further in this office action. Claim 18 was previously withdrawn due to the restriction requirement. Accordingly, due to the withdrawal of the finality of the previous office action, this action is made **NON-FINAL**.

Response to Remarks

2. In the office action dated 8/24/2009, claims 9-17 and 19 were rejected for obviousness type double patenting over claims 9-19 and 21 of co-pending Application No. 10/587802. In the response filed on 10/26/2009, the Applicants filed a terminal disclaimer. The terminal disclaimer has been disapproved, as the terminal disclaimer was not filed by an attorney or record. See paragraphs 3-5 of this office action. Therefore, the rejection of claims 9-17 for obviousness type double patenting over

claims 9, 12-19, and 21 of co-pending Application No. 10/587802 is maintained. For Applicant's convenience, this rejection will be restated further in this office action.

3. The terminal disclaimer filed on 10/26/2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of co-pending Application No. 10/587802 has been reviewed and is NOT accepted.

4. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

5. The assignee has not established its ownership interest in the application, in order to support the terminal disclaimer. There is no submission in the record establishing the ownership interest by either (a) providing documentary evidence of a chain of title from the original inventor(s) to the assignee and a statement affirming that the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11, or (b) specifying (by reel and frame number) where such documentary evidence is recorded in the Office (37 CFR 3.73(b)).

Response To Remarks

6. In the response filed on 10/26/2009, claims 9-17 and 19 were amended to remove indefinite language from the claims. Due to the amendment, the rejection of claims 9-17 and 19 under 35 USC § 112, second paragraph is withdrawn. However, a modified rejection of the claims under 35 USC § 103(a) has been made, which will be discussed below.

7. Claims 9-17 and 19 were examined.

8. Claims 9-17 and 19 are rejected.

Claim Rejections-35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

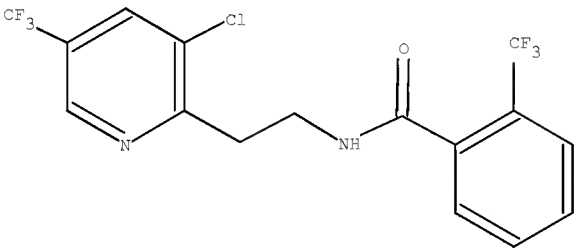
10. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

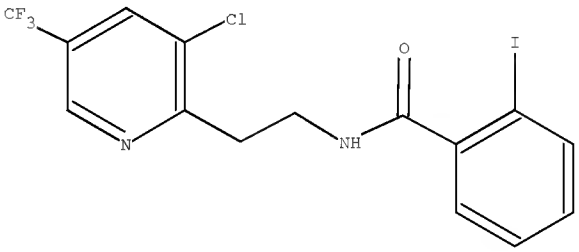
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

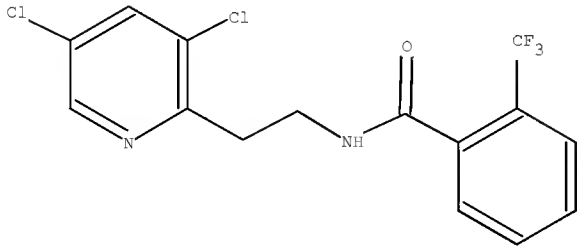
11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 9-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et. al., WO 2001/11965, in view of Wegmann et. al., WO 2003/041501, and further in view of Stenzel et. al., *Brighton Crop Protection Conference-Pests and Diseases*, **2**, pp. 367-374, 1998, and Leroux et. al., *Pest Management Science*, **58**, pp. 876-888, 2002. For convenience, an abstract of the Brighton Crop Protection Conference will be referenced. Once the full paper becomes available, a copy will be furnished to the Applicants. The reference of Wegmann et. al. was previously submitted by the Applicants in the Information Disclosure Statement.

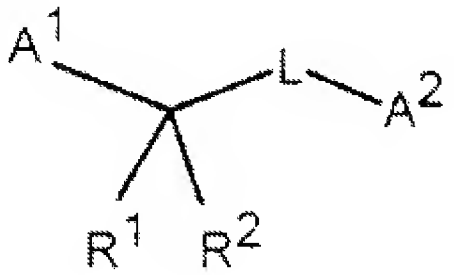
The claims are drawn to a composition comprised of (a) pyridylethylbenzamide compound, and (b) a compound capable of inhibiting spore germination or mycelium growth of fungi, in which the weight ratio of (a)/(b) is from 0.01 to 20. The claims are further directed to the composition comprising an additional fungicidal agent, (c). The pyridylethylbenzamide compounds claimed for component (a) are:







Cooke et. al. teaches compounds of formula (I) shown below:



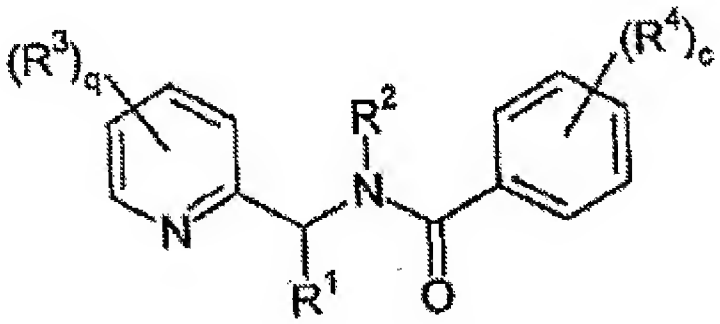
(I)

Where A^1=2-pyridyl, which is substituted up to 4 groups, at least one of which is haloalkyl, etc.; R^1, R^2, R^3, R^5=R^b, etc.; R^b= H, etc.; L=-CH(R^3)N(R^5)C(=X)-, etc.; X=O, etc.; A^2=carbocyclyl, which is substituted, etc (paragraphs [0002-0016]). In particular, Cooke et. al. teaches that substituents of the 2-pyridyl ring can be halogens and/or trifluoromethyl, and are preferably present at the 3 and/or 5 positions of the ring (paragraphs [0017] and [0021]). It is also suggested by Cooke et. al. that A^2=phenyl, which can be substituted by halogens (paragraph [0022] and [0026]). Cooke et. al. also teaches that the fungicides are present in a composition with an agriculturally acceptable support or carrier (paragraph [0039]), and that the composition can further comprise one or more additional active fungicides, insecticides, or antibacterial agents (paragraph [0041]). Therefore, Cooke et. al. suggests the pyridylethylbenzamide compounds instantly claimed.

While Cooke et. al. teaches that the pyridylethylbenzamide compounds can be combined with additional fungicidal agents, it is not explicitly taught that the additional

fungicidal agents inhibit spore germination or mycelium growth, or that the weight ratio of pyridylethylbenzamide compounds to additional antifungal agents is from 0.01 to 20.

Wegmann et. al. teaches a fungicidal composition comprised of (a) pyridylmethylbenzamide compounds and (b) valinamide compounds, such as iprovalicarb (Abstract). The pyridylmethylbenzamide compounds taught by Wegmann et. al. are shown below:



(I)

Where R^3=halogen, trifluoromethyl, etc.; R^4=halogen, trifluoromethyl, etc.; R^1=H, alkyl radical, etc.; R^2=H, alkyl radical, etc.; q=0-4; c=0-4 (p. 3, line 19-p. 4, line 8; p. 5, lines 29-30). Wegmann et. al. teaches that the weight ratio of the pyridylmethylbenzamide compound to the valinamide compound (b) is from 1/100 to 100/1 (0.01 to 100), which includes the weight ratio range instantly claimed (p. 7, lines 6-13). Particularly, Wegmann et. al. teaches that the valinamide compound, iprovalicarb, is a suitable agent for compound (b) (Abstract), which meets the limitations of claims 14 and 19. Wegmann et. al. teaches that, in addition to compounds (a) and (b), the composition can further comprise additional fungicidal agents (c), such as tebuconazole, cyprodinyl, bromoconazole, and diethofencarb, which meets the limitations of claims 15 and 16.

Wegmann et. al. teaches that the composition comprised of compounds (a) and (b) provides a synergistic effect against phytopathogenic fungal organisms (Abstract; p. 7, lines 4-5; p. 8, lines 1-2). The pyridylmethylbenzamide compounds taught by Wegmann et. al. of formula (I), in which R^1=H, and R^2=H, are homologues of the instantly claimed compounds, in that they differ by a -CH_2- moiety between the pyridyl ring and the benzamide nitrogen. Compounds which are homologues are expected to have similar chemical and physical properties, absent unexpected results. The compounds taught by Wegmann et. al. of formula (I), in which R^1=CH_3 and R^2=H, are isomeric to the pyridylethylbenzamide compounds claimed, as both compounds have an ethyl moiety between the pyridyl ring and the nitrogen of the benzamide group. The ethyl group of the compounds taught by Wegmann et. al. has a 1,1-linkage, while the compounds claimed have a 1,2-linkage to the pyridyl ring and benzamide nitrogen. Wegmann et. al. teaches that the compounds of formula (I) include optical and geometric isomers; therefore, the compounds taught by Wegmann et. al. embrace the pyridylethylbenzamide compounds instantly claimed.

As the compounds taught by Wegmann et. al. are fungicides, it would have been prima facie obvious for one of ordinary skill in the art to replace the pyridylmethylbenzamide compounds taught by Wegmann et. al. with the pyridylethyl benzamide compounds taught by Cooke et. al. in the composition taught by Wegmann et. al., because both compounds are homologous and/or isomers of each other and are effective as fungicides. Therefore, one of ordinary skill in the art would have expected success in substituting the pyridylethylbenzamide compounds for the

pyridylmethylbenzamide compounds taught by Wegmann et. al., along with combining these compounds with iprovalicarb, because both of the compounds taught by Cooke et. al. and Wegmann et. al. are active against phytopathogenic fungi.

While Wegmann et. al. teaches that pyridylmethyl benzamide compounds are combined in a composition with valinamide compounds such as iprovalicarb to provide a synergistic effect against phytopathogenic fungal organisms, it is not explicitly taught that iprovalicarb acts to inhibit spore germination or mycelium growth.

Stenzel et. al. teaches that iprovalicarb is effective against phytopathogenic fungi, through inhibiting spore germination and mycelium growth (Abstract). Stenzel et. al. also teaches that the use of iprovalicarb as a fungicide results in eradication of phytopathogenic fungi, while providing protection to the plant, and does not show cross-resistance towards several other fungicide compounds (Abstract). Stenzel et. al. also suggests that combination of iprovalicarb with other fungicides can provide broad spectrum antifungal activity with respect to a variety of different crops (Abstract).

Leroux et. al. teaches that phthalimide derivatives such as captan and folpet have a mechanistic action which entails inhibition of spore germination in phytopathogenic fungi (p. 877, left column, lower paragraph). Leroux et. al. also teaches that dicarboximides inhibit spore germination and hyphal growth in phytopathogenic fungi (p. 879, right column, lower paragraph).

Wegmann et. al. teaches that the composition can further comprise dicarboximide compounds such as iprodione, procymidone, and vinclozolin, as well as phthalimide derivatives such as captafol, captan, and folpet (p. 8, lines 12-33). As

Stenzel et. al. teaches that iprovalicarb acts by inhibiting spore germination and mycelium growth, and Leroux et. al. teaches that dicarboximide derivatives and phthalimide derivatives such as captan and folpet inhibit spore germination, it would have been prima facie obvious for one of ordinary skill in the art to substitute iprovalicarb in the composition taught by Wegmann et. al. with the claimed phthalimide or dicarboximide compounds, because all of these compounds act by inhibiting mycelium growth and/or spore germination in phytopathogenic fungi. Therefore, one of ordinary skill in the art would have expected success in substituting the claimed phthalimide or dicarboximide compounds for iprovalicarb, because iprovalicarb, the claimed dicarboxamides, and the claimed phthalimides have a similar mechanism of action towards phytopathogenic fungi.

Claim Rejections-Obviousness Type Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 9-17 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 9, 12-19, and 21 of copending Application No. 10/587802 in view of Leroux, *Pest Management Science*, **47**, pp. 191-197.

This is a provisional obviousness-type double patenting rejection.

3. The instant claims are directed to a composition comprised of the elected compound (a), N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, and an additional compound (b) which inhibits fungal spore germination or mycelium growth, in a weight ratio of (a)/(b) from 0.01 to 20. The instant claims are also directed to an additional fungicidal compound (c).

The co-pending claims are directed to a fungicidal composition comprised of compound (a), N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-iodobenzamide, or N-{2-[3, 5-dichloro-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and an additional compound (b) which inhibits electron transport in cellular respiration of fungi. The co-pending claims are also directed to an additional fungicide compound (c). While the (b) components of the instant claims and the co-pending claims act on different metabolic pathways of fungi, both sets of claims include an additional component (c). It is also taught by Leroux that many fungicidal agents have multiple

mechanisms of action; in particular, it is taught that iprodione, in addition to inhibiting mycelium growth, also inhibits electron transport (p. 193, right column, third full paragraph). Therefore, as both claim sets are drawn to compositions comprised of N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-iodobenzamide, or N-{2-[3, 5-dichloro-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and compounds which inhibit electron transport and inhibit mycelium growth or spore germination, the claims are not patentably distinct from each other. Additionally, the claims use comprising language, and do not exclude the presence of additional types of anti-fungal agents.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST, with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627